Astrobiology Grand Tour Western Australia

18 - 28 June, 2013



This eleven-day scientific discovery tour that journeys from the Western Australian coastal town of Denham through to the Pilbara will be a trip back in time. It is designed for scientists interested in the earliest life on Earth, and early environments. Highlights range from the modern stromatolites of Shark Bay, through the banded iron formations of the Hamersley Ranges to the earliest convincing evidence of life on Earth in the 3.5 billion-year-old rocks of the Pilbara Craton. Your guide, Professor Malcolm Walter, will take you through some of Australia's most remote and remarkable countryside. Accommodation will be in a sheep station (ranch), country hotels and camping under the stars (made easy by professional camp managers, Outdoor Spirit).

Tour Itinerary

Day 1: 18 June, 2013 - PERTH

Arrive into Perth today and make your own arrangements with the hotel. Over dinner tonight you will have the opportunity to meet your colleagues and learn more about the upcoming days with a presentation from your Camp Managers and guide, Malcolm Walter. (D) – Sullivans Hotel Perth City

Day 2: 19 June, 2013 - SHARK BAY

We transfer this morning from our Perth hotel to the airport, before flying into Denham, home of Shark Bay. (*Flight not included, see below.) This World Heritage-listed Marine Park is renowned for its diversity and is home to sea turtles, dolphins, whales, dugongs, and its famous stromatolites. Visit the eco-friendly Ocean Park for lunch. Enjoy a warm welcome to Carbla Station, your home for two nights, with a late afternoon introduction to the stromatolites of Carbla Point. (B,L,D) – Carbla Station (Shearers Quarters)

Day 3: 20 June, 2013 - SHARK BAY

This will be the day for a detailed examination of the stromatolites and associated sediments of Hamelin Pool. Snorkelling gear will be provided to those who really want to get up close and personal. (B,L,D) - Carbla Station (Shearers Quarters)

Day 4: 21 June, 2013 - TOM PRICE

There's no denying it, Australia is a country of wide open plains, and today you will get just some idea of the enormity of this country! We depart Carbla early and arrive into Tom Price Motel for dinner and a comfortable night's sleep. (B,L,HD)

- Tom Price Motel

Day 5: 22 June, 2013 - KARIJINI NATIONAL PARK - Banded Iron Formation

Touring the massive Tom Price iron ore mine this morning will be memorable! After the tour, we venture through the beautiful Karijini country for an examination of the spectacularly exposed banded iron formation in Dales Gorge with a picnic lunch and an opportunity for a refreshing dip. Two and a half billion years in the making, Karijini National Park is one of the country's most spectacular natural attractions. (B,L,D) - Karijini National Park (Camping)

Day 6: 23 June, 2013 – "KNOSSOS" – 2.7 Ga life and environments

Rising abruptly 350m from the coastal plain the Chichester Range is composed of rolling hills, escarpments, jagged peaks, gorges and winding tree-lined watercourses. See evidence for the presence of cyanobacteria by 2.7 billion years ago in the stromatolites of the Fortescue Group. There is more opportunity to count stars, as you camp this evening. (B,L,D) - Gallery Hill (camping)





Day 7: 24 June, 2013 - GALLERY HILL TO MARBLE BAR

A dawn walk will take us to some rarely seen rock art by the Bailgu or Palyku peoples at Gallery Hill. From there we will travel to Marble Bar to examine the jasper (not marble!) controversially interpreted as indicating that there was free oxygen in the early atmosphere. The historic gold mining town of Marble Bar has the dubious title of Australia's hottest town. It is listed in the Guinness Book of Records for reaching 37.8°C or more for 160 consecutive days. However, the southern winter offers mild daytime temperatures and cool nights. **(B,L,HD)** – Marble Bar Travellers Stop

Day 8 + 9 : 25 + 26 June, 2013 - SHAW RIVER

There is an optional three-hour walk to see the famous (or infamous depending on your point of view) 3.5 Ga microfossil locality in Chinamans Creek. From there we head to the ironically named locality nearby known as *North Pole*. We have two nights camping on the Shaw River whilst examining stromatolites in the 3.35 Ga Strelley Pool and 3.49 Ga Dresser Formations. This is the oldest convincing evidence of life on Earth (we will debate that issue on the outcrops) **(B,L,D)**, **(B,L,D)** – Shaw River Campsite

Day 10: 27 June, 2013 - PORT HEDLAND

Well known for its massive resource industry, enormously long trains, big ships and salt piles Port Hedland is our final destination. There will be a farewell dinner. (B,L,HD) - The Lodge South Hedland

Day 11: 28 June, 2013 - ONWARD JOURNEY

Your tour ends this morning after breakfast with a transfer to Port Hedland International Airport. (B)

Tour Cost and Inclusions

- Professional Campsite Manager and Tour Director / Driver
- 4 nights, comfortable country accommodation
- 6 nights camping with camping equipment, medical support and camp management
- Breakfasts, lunches and dinners as per itinerary (B = Breakfast, L = Lunch, D = Dinner, HD = Hotel Dinner)
- Tom Price Mine and Pilbara Railway Tour
- National Park Entrance fees
- Private air-conditioned all-terrain coach

Cost: AUD\$4690* per person – twin share AUD\$ 375* – single supplement (for those not wishing to share)

Items <u>not</u> included are: Airport, airline and government taxes, airport transfer Perth, visa fees; other meals as required, beverages with meals, additional optional activities; health costs; personal expenditure, shopping.

Travel Insurance – Travel insurance is required for all participants joining the journey. We strongly recommend you take this out at the time of depositing the tour.

Domestic Flight – The flight Perth to Denham will be booked on your behalf once minimum numbers have been met. *NB*. *Current price for this flight is \$395 plus airport taxes (as at 23 June, 2012) and is not included in the tour package price.*

Reservations

To secure your place, please return a copy of the booking form to marnie@fredwatson.com.au. On receipt of the booking form a place is held for you on the tour program for 10 days. Reservations are confirmed with receipt of a non-refundable deposit of \$400 and a completed medical questionnaire within 10 days. Final payment, plus insurance details, due prior to 1 April 2013.

*Valid for Sale 5 August, 2012 – 18 April, 2013. Valid for travel 18 June – 28 June 2013. Itinerary is subject to change at any time. A minimum number of 18 people will be required for this tour. Alternative arrangements will be made if these numbers are not achieved.

